

Claims

1. A data processing system comprising a processor, a non-volatile storage medium including configuration data that describes the configuration of the non-volatile storage medium, a controller for managing data exchanges with the non-volatile storage medium and for invoking an uninterruptible software routine in response to first software attempting to access the configuration data; the uninterruptible software routine having code for determining whether the first software is authorized to access the configuration data and for allowing or preventing any such access according to the determination.

2. The data processing system of claim 1, in which the first software is initialization software for initializing the data processing system.

3. The data processing system of claim 1, wherein the configuration data comprises at least a portion of first data included in a data structure of the non-volatile storage medium.

4. The data processing system of claim 3, wherein the data structure includes a Master Boot Record.

5. The data processing system of claim 1, wherein the configuration data comprises executable code.

6. The data processing system of claim 5, wherein the executable code includes Master Boot Code.

7. The data processing system of claim 1, wherein at least one of the configuration data and data associated with the first software are encrypted and the controller includes a decrypter of at least one of the configuration data and data associated with the first software.

8. The data processing system of claim 7, wherein the decrypter is arranged to decrypt at least one of the configuration data and the data associated with the first software for deriving decrypted configuration data for supporting access to the non-volatile storage medium.

9. The data processing system of claim 8, wherein the data associated with the first software comprises a decryption key.

10. The data processing system of claim 7, wherein the data associated with the first software includes a software signature.

11. The data processing system of claim 7 wherein the decrypter is arranged to derive a decryption key in response to at least one of the data associated with the first software and the configuration data.

12. The data processing system of claim 1 wherein the interrupt includes an SMI interrupt and the uninterruptible software routine includes a system management mode code executable within a constrained or protected operating environment.

13. The data processing system of claim 1 further including an operating system loader for loading an operating system for the data processing system and wherein the configuration data is arranged to provide access to the operating system loader to load the operating system for the data processing system from the non-volatile storage medium.

14. The data processing system of claim 1 wherein the first software is at least one of an operating system or application.

15. A system comprising a processor, a first non-volatile storage medium having first and second firmware and a second non-volatile storage medium for storing configuration data that describes the configuration of the second non-volatile storage medium; the processor having a first mode of operation for executing the first firmware and a second mode of operation for executing the second firmware; the processor being

arranged to enter the second mode of operation and execute the second firmware in response to the first firmware, executing in the first mode of operation, at least attempting to access the configuration data; the second firmware being arranged to determine whether the first software is authorized to access the configuration data.

16. A method of controlling a data processing system, the system comprising a processor, first non-volatile storage storing first software and an uninterruptible software routine for executing within respective modes of operation of the processor, and a second non-volatile storage medium storing configuration data associated with the second non-volatile storage medium; the first software having associated identification data; the method comprising the steps of: executing the uninterruptible software routine, in the second mode of operation of the processor, in response to the first software, executing within the first mode of operation of the processor, at least attempting to access the configuration data; determining whether the first software is authorized to access the configuration data; and controlling access to the configuration data according to that determination.

17. The method of claim 16 wherein the uninterruptible software routine includes accessing to authorization data and the step of determining comprises the steps of: comparing the identification data associated with the first software with the authorization data to determine whether or not they match; and authorizing access or otherwise to the configuration data according to the comparison.

18. The method of claim 17, wherein the comparing step comprises the steps of: subjecting at least the identification data to an algorithm to produce a processing result; comparing the processing result to the authorization data; and authorizing access or otherwise to the configuration data according to the comparison.

19. The method of claim 16, further comprising the steps of subjecting at least the configuration data to a configuration data algorithm to produce second configuration data.

20. The method of claim 19, wherein the subjecting step comprises subjecting the configuration data and identification data associated with the first software to the configuration data algorithm to produce the second configuration data.

21. A memory storing a computer program for causing the system of claim 16 to perform the method of claim 16.

22. The computer system of claim 16 programmed to perform the method of claim 16.